

Claims

1. A method of updating a database of commodity information including multiple predefined commodity designations representing multiple predefined commodities and an estimated market price stored in association with one or more of the commodity designations, comprising:
- 5 providing an online reverse auction environment accessible via a computer network;
- receiving a request for proposals (RFP) from a customer at the online reverse auction environment, the RFP including a request for bids on at least a specified one of the commodities;
- 10 soliciting multiple potential vendors to submit proposals responsive to the RFP in the online reverse auction environment;
- 15 receiving one or more vendor proposals in the online reverse auction environment, at least one of the vendor proposals being responsive to the RFP and including a proposed price for the specified commodity;
- extracting the proposed price from each of the responsive vendor proposals;
- comparing the proposed price to the estimated market price of the specified commodity; and
- 20 updating the database with the proposed price so that the estimated market price more accurately approximates an actual market price.
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2. The method of claim 1 in which the updating of the database includes updating the estimated market price only if the proposed price is less than the estimated market price.
3. The method of claim 1 in which the estimated market price has an age and the updating of the database includes updating the estimated market price when its age exceeds a predetermined expiration age.

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4. The method of claim 1 in which:
the RFP includes an anticipated quantity of the specified commodity;
the database includes a volume-based estimated market price for each of
multiple predefined quantity ranges of each of the commodities, at least one of the
5 predefined quantity ranges corresponding to the anticipated quantity of the RFP; and
the comparison of the proposed price to the estimated market price includes
comparing the proposed price to the volume-based estimated market price
corresponding to the anticipated quantity.
- 10 5. The method of claim 1 in which the commodities include
telecommunications services.
- 15 6. The method of claim 1 in which the database includes one or more
nonprice market terms for each of the commodities.
7. The method of claim 6 in which the nonprice market term is associated
with a combination of:
(a) one or more of the commodities, and
(b) the estimated market price for said one or more commodities.
- 20 8. The method of claim 6 in which the nonprice market terms are selected
from the group consisting essentially of:
(a) contract duration;
(b) quality of service;
25 (c) refund policies;
(d) warranties;
(e) customer service response time;
(f) customer service escalation obligations;
(g) multilingual support services;
30 (h) e-mail response services;

- 5 (i) exclusivity terms;
(j) discounts;
(k) installation fees;
(l) risk allocation;
(m) contract renewal terms;
(n) contract termination conditions; and
(o) any combination of (a) to (n).

9. A method of updating a database of commodity information including
10 multiple predefined commodity designations representing multiple predefined commodities, an estimated market price stored in association with one or more of the commodity designations, and a nonprice market term stored in association with one or more of the commodity designations, the method comprising:

15 providing an online reverse auction environment accessible via a computer network;

receiving a request for proposals (RFP) from a customer at the online reverse auction environment, the RFP including a request for bids and a desired nonprice term for at least a specified one of the commodities;

20 soliciting multiple potential vendors to submit proposals responsive to the RFP in the online reverse auction environment;

25 receiving one or more vendor proposals in the online reverse auction environment, at least one of the vendor proposals being responsive to the RFP and including a proposed price for the specified commodity and a proposed nonprice term;

extracting the proposed price and the proposed nonprice term from each of the
25 responsive vendor proposals;

comparing the proposed price and the proposed nonprice term with the respective estimated market price and nonprice market term of the database corresponding to the specified commodity; and

30 updating the database with the proposed price so that the estimated market price more accurately approximates an actual market price.

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10. The method of claim 9 in which the updating of the database includes updating the estimated market price only if the proposed price is less than the estimated market price.

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11. The method of claim 9 in which the estimated market price has an age and the updating of the database includes updating the estimated market price when its age exceeds a predetermined expiration age.

10 12. The method of claim 9 in which:

the RFP includes an anticipated quantity of the specified commodity; the database includes a volume-based estimated market price for each of multiple predefined quantity ranges of each of the commodities, at least one of the quantity ranges corresponding to the anticipated quantity of the RFP; and

15 the comparison of the proposed price to the estimated market price includes comparing the proposed price to the volume-based estimated market price corresponding to the anticipated quantity.

20 13. The method of claim 9 in which the commodities include telecommunications services.

14. The method of claim 9 in which the nonprice market term is associated with a combination of:

- (a) one or more of the commodities, and
- (b) the estimated market price for said one or more of the commodities.

25 15. The method of claim 9 in which the nonprice market terms are selected from the group consisting essentially of:

- (a) contract duration;
- (b) quality of service;

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- (c) refund policies;
- (d) warranties;
- (e) customer service response time;
- (f) customer service escalation obligations;
- 5 (g) multilingual support services;
- (h) e-mail response services;
- (i) exclusivity terms;
- (j) discounts;
- (k) installation fees;
- 10 (l) risk allocation;
- (m) contract renewal terms;
- (n) contract termination conditions; and
- (o) any combination of (a) to (n).

15 16. A system for facilitating the purchase of telecommunications services, comprising:

- a best of class database including an estimated market price for at least one telecommunications service;
- 20 a customer traffic history database including traffic information describing a historical quantity of the telecommunications service used by a customer during a previous time period;
- 25 an RFP preparation module accessible by the customer via the Internet for preparation of a request for proposals (RFP) describing an anticipated quantity of the telecommunications service, the RFP preparation module being adapted to extract the historical quantity from the customer traffic history database for use in determining the anticipated quantity of the telecommunications service;
- 30 an online reverse auction environment, accessible by multiple potential vendors via the Internet, the potential vendors including one or more interested vendors, the online reverse auction environment adapted to display the RFP to the interested vendors and to receive bids on the RFP from the interested vendors; and

a bid analysis module in communication with the online reverse auction environment and the best of class database for analyzing the received bids.

17. The system of claim 16, further comprising a database updating module
5 for updating the best of class database in response to the bids received from the interested vendors.

18. The system of claim 16 in which the online reverse auction environment includes security for admitting potential vendors only with a valid username and
10 password.

19. The system of claim 16 in which the bid analysis module is configured to provide a feedback in response to receipt of a new bid at the online reverse auction environment.

15 20. The system of claim 19 in which the feedback includes a ranking of the new bid relative to the bids previously received at the online reverse auction environment.

20 21. The system of claim 20 in which the feedback is provided to the interested vendor that submitted the new bid.

22. The system of claim 19 in which the feedback is provided via email to interested vendors that have submitted bids previous to the new bid.

25 23. The system of claim 19 in which the feedback is provided via email to the potential vendors.

24. The system of claim 16, further comprising a reference checking
30 subsystem for receiving from each of the interested vendors an email address of a

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reference individual and for receiving from the reference individual a reference feedback concerning the interested vendor.

25. The system of claim 16 in which:

5 the best of class database includes a volume-based estimated market price for each of multiple predefined quantity ranges of each of the telecommunications services, at least one of the quantity ranges corresponding to the anticipated quantity of the telecommunications service; and

the bid analysis module is adapted to compare the received bid with the 10 volume-based estimated market price corresponding to the anticipated quantity.

26. The system of claim 16 in which:

the database includes one or more nonprice market terms for the telecommunications services;

15 the RFP preparation module prompts the customer for one or more desired nonprice terms; and

the online reverse auction environment prompts the interested vendors for responses to the desired nonprice terms as part of the bids of the interested vendors.

20 27. The system of claim 26 in which the bid analysis module is adapted to analyze the responses to the desired nonprice terms when analyzing the received bids.

28. A system for facilitating the purchase of telecommunications services, comprising:

25 a best of class database including an estimated market price for at least one telecommunications service;

a customer traffic history database including traffic information describing a historical quantity of the telecommunications service used by a customer during a previous time period;

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an RFP preparation module accessible by the customer via the Internet for preparation of a request for proposals (RFP) describing an anticipated quantity of the telecommunications service, the RFP preparation module being adapted to extract the historical quantity from the customer traffic history database for use in determining the anticipated quantity of the telecommunications service;

5 an online reverse auction environment accessible by multiple potential vendors via the Internet, the potential vendors including one or more interested vendors, the online reverse auction environment adapted to present the RFP to the interested vendors and to receive bids on the RFP from the interested vendors;

10 a bid analysis module in communication with the online reverse auction environment and the best of class database for analyzing the received bids and generating a feedback in response to the received bids; and

15 a database updating module for updating the best of class database in response to the received bids so that the estimated market price more accurately approximates an actual market price.

29. The system of claim 28 in which the online reverse auction environment includes security for admitting potential vendors only with a valid username and password.

20 30. The system of claim 28 in which the feedback is provided to the interested vendor that submitted the received bid.

25 31. The system of claim 28 in which the feedback is provided via email to the potential vendors.

32. The system of claim 28 in which:
the received bids include a newly received bid and a previously received bid;
and

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the feedback includes a ranking of the newly received bid relative to the previously received bid.

33. The system of claim 32 in which the feedback is provided to the interested vendor that submitted the previously received bid.

34. The system of claim 28, further comprising a reference checking subsystem for receiving from each of the interested vendors an email address of a reference individual and for receiving from the reference individual a reference feedback concerning the interested vendor.

35. The system of claim 28 in which:

the best of class database includes a volume-based estimated market price for each of multiple predefined quantity ranges of each of the telecommunications services, at least one of the quantity ranges corresponding to the anticipated quantity of the telecommunications service; and

the bid analysis module is adapted to compare the received bid with the volume-based estimated market price corresponding to the anticipated quantity.

36. The system of claim 28 in which:

the RFP preparation module prompts the customer for one or more desired nonprice terms; and

the online reverse auction environment prompts the interested vendors for responses to the desired nonprice terms as part of the bids of the interested vendors.

37. The system of claim 36 in which the bid analysis module is adapted to analyze the responses to the desired nonprice terms when analyzing the received bids.

38. The system of claim 36 in which:

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the best of class database includes one or more nonprice market terms for the telecommunications services; and

the database updating module is adapted to update the estimated market price and the nonprice market terms of the best of class database.

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39. A system for reducing the cost of telecommunications services, comprising:

a best of class database including multiple generic classes of telecommunications service and an estimated market price for one or more of the generic classes of telecommunications service;

a customer traffic history database including traffic information describing a historical quantity of at least some of the generic classes of telecommunications service used by a customer during a previous time period;

a spending analysis software module for reading multiple telecommunications billing statements including traffic detail data, extracting the traffic detail data from the telecommunications billing statements, converting the traffic detail data to the generic classes of telecommunications service, and updating the historical quantity of the customer traffic history database with the converted traffic detail data;

an RFP preparation module accessible by the customer via the Internet for preparation of a request for proposals (RFP) describing an anticipated quantity of a specified one of the generic classes of telecommunications service, the RFP preparation module being adapted to extract the historical quantity from the customer traffic history database for use in determining the anticipated quantity of the specified generic class of telecommunications service;

an online reverse auction environment accessible by multiple potential vendors via the Internet, the potential vendors including one or more interested vendors, the online reverse auction environment adapted to present the RFP to the interested vendors and to receive bids on the RFP from the interested vendors;

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a bid analysis module in communication with the online reverse auction environment and the best of class database for analyzing the received bids and generating a feedback in response to the received bids; and

5 a database updating module for updating the best of class database with at least one of the received bids so that the estimated market price more accurately approximates an actual market price.

40. The system of claim 39 in which the feedback is provided to the interested vendor that submitted the received bid.

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41. The system of claim 39 in which the feedback is provided via email to the potential vendors.

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42. The system of claim 39 in which:
the received bids include a newly received bid and a previously received bid;
and
the feedback includes a ranking of the newly received bid relative to the previously received bid.

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43. The system of claim 40 in which the feedback is provided to the interested vendor that submitted the previously received bid.

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44. The system of claim 39, further comprising a reference checking subsystem for receiving from each of the interested vendors an email address of a reference individual and for receiving from the reference individual a reference feedback concerning the interested vendor.

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45. The system of claim 39 in which:
the best of class database includes a volume-based estimated market price for each of multiple predefined quantity ranges of each of the generic classes of

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telecommunications services, at least one of the quantity ranges corresponding to the anticipated quantity of the specified generic class of telecommunications service; and

the bid analysis module is adapted to compare the received bid with the volume-based estimated market price corresponding to the anticipated quantity.

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46. The system of claim 39 in which:

the RFP preparation module prompts the customer for one or more desired nonprice terms; and

the online reverse auction environment prompts the interested vendors for responses to the desired nonprice terms as part of the bids of the interested vendors.

10 47. The system of claim 46 in which the bid analysis module is adapted to analyze the responses to the desired nonprice terms when analyzing the received bids.

15 48. The system of claim 46 in which:

the best of class database includes one or more nonprice market terms for each of the generic classes of telecommunications services; and

the database updating module is adapted to update the estimated market price and the nonprice market terms of the best of class database.

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49. A computer-implemented method of analyzing telecommunications traffic, comprising:

extracting traffic detail data from multiple billing statements, the billing statements being received from various telecommunications carriers, the traffic detail data of each billing statement describing at least one telecommunications traffic event;

converting the traffic detail data to a generic traffic format, the generic traffic format defining multiple generic classes of service;

storing the converted traffic detail data in a customer traffic history database; and

30 summarizing the converted traffic detail data.

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50. The method of claim 49, further comprising:
providing a best of class database including an estimated market price for one
or more of the generic classes of service;
- 5 analyzing the traffic detail data to determine an actual cost of the
telecommunications traffic; and
comparing the actual cost to the estimated market price.
51. The method of claim 50, further comprising generating an RFP
10 recommendation notice when the actual cost exceeds the estimated market price.
52. The method of claim 50, further comprising updating the best of class
database based on the actual cost.
- 15 53. The method of claim 49 in which:
the traffic detail data includes, for each telecommunications traffic event, a
traffic direction, a type of service, a boundary type, and an applicable carrier rate
schedule; and
the converting of traffic detail data to the generic traffic format includes
20 applying a predefined set of translation rules that relate the traffic detail data to a set
of predefined generic classes of service based on the traffic direction, the type of
service, the boundary type, and the applicable rate schedule of the traffic detail data.
- 25 54. The method of claim 53 in which the converting of the traffic detail data
to the generic traffic format includes:
providing a traffic classification conversion table including the multiple generic
classes of service and associated with carrier-dependent traffic detail characteristics;
and
for each telecommunications traffic event, identifying in the traffic
30 classification conversion table a matching one of the generic classes of service

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associated with the carrier-dependent traffic characteristics that correspond to the traffic direction, the type of service, the boundary type, and the applicable rate schedule of the telecommunications traffic event.

5 55. The method of claim 53 in which:

the traffic direction is selected from the group consisting of incoming and outgoing;

the type of service is selected from the group consisting of voice, paging, cellular, and data transmission; and

10 the boundary type is selected from the group consisting of interstate, inter-LATA, and international.

15 56. The method of claim 49 in which a first one of the telecommunications carriers provides services under a contract including a minimum target quantity for a contracted class of the generic classes of service, the method further comprising:

analyzing the converted traffic detail data of the first telecommunications carrier to identify a projected traffic deficit relative to the minimum target quantity; and

20 analyzing the converted traffic detail data of a second one of the telecommunications carriers to identify a future surplus traffic volume corresponding to the contracted class of the first telecommunications carrier.

25 57. The method of claim 56, further comprising rerouting the future surplus traffic volume to the first telecommunications carrier to thereby reduce the projected traffic deficit.

58. The method of claim 49 in which a contracting one of the telecommunications carriers provides services under a contract including a contracted service order fee, the method further comprising:

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analyzing the billing statement to identify a service order event including a billed order fee;

comparing the billed order fee with the contracted service order fee to identify a service order fee discrepancy; and

- 5 notifying the customer of the service order fee discrepancy.

59. The method of claim 58, further comprising automatically generating a message to the contracting telecommunications carrier in response to the existence of the service order fee discrepancy, the message requesting adjustment of the billed order fee.

10 60. A computer-implemented telecommunications spending analysis system for analyzing multiple telecommunications billing statements received by a customer from various telecommunications carriers, each telecommunications billing statement 15 including traffic detail data for multiple telecommunications traffic events, comprising:

a set of computer-readable translation rules that relate the traffic detail data to multiple predefined generic classes of service;

20 a traffic genericizing module for converting the traffic detail data to a generic traffic detail format in accordance with the translation rules;

a customer traffic history database for storing the converted traffic detail data; and

25 a traffic analysis software module in communication with the customer traffic history database for analyzing the converted traffic detail data to thereby allow convenient summarizing, storage, and reporting of the traffic detail data.

61. The system of claim 60 in which the traffic genericizing module is operable on a personal computer.

62. The system of claim 60 in which the customer traffic history database is accessible via the Internet for storing the converted traffic detail data.

5 63. The system of claim 60 in which the traffic analysis software module is accessible remotely via the Internet using a web browser.

64. The system of claim 60 in which the translation rules relate the traffic detail data to the generic classes of service on the basis of a traffic direction, a type of service, a boundary type, and an applicable carrier rate schedule of each

10 telecommunications traffic event.

65. The system of claim 64 in which:

the traffic direction is selected from the group consisting of incoming and outgoing;

15 the type of service is selected from the group consisting of voice, paging, cellular, and data transmission; and

the boundary type is selected from the group consisting of interstate, inter-LATA, and international.

20 66. The system of claim 60, further comprising a best of class database including an estimated market price for one or more of the generic classes of service, and in which the traffic analysis software module is adapted to analyze the traffic detail data to determine an actual cost of the telecommunications traffic and compare the actual cost to the estimated market price.

25 67. The system of claim 66 in which the traffic analysis software module generates an RFP recommendation notice when the actual cost exceeds the estimated market price.

30 68. The system of claim 60 in which:

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a first one of the telecommunications carriers provides services under a contract including a minimum target quantity for a contracted class of the generic classes of service;

the traffic analysis software module is adapted to analyze the converted traffic detail data of the first telecommunications carrier to identify a projected traffic deficit relative to the minimum target quantity; and

the traffic analysis software module is adapted to analyze the converted traffic detail data of a second one of the telecommunications carriers to identify a future surplus traffic volume corresponding to the contracted class of the first

10 telecommunications carrier.

69. The system of claim 68 in which the traffic analysis software module sends a traffic redirection suggestion message to the customer in response to the existence of the projected traffic deficit and the surplus traffic volume, the traffic redirection suggestion message identifying the future surplus traffic volume and recommending a routing change to direct the future surplus traffic volume to the first telecommunications carrier and to thereby reduce the projected traffic deficit.

70. The system of claim 60, further comprising a contract terms database including terms of a service contract between the customer and a contracting one of the telecommunications carriers, the service contract including a contracted service order fee, and in which the traffic analysis software module is adapted to analyze the billing statement to identify a service order event including a billed order fee, compare the billed order fee with the contracted service order fee to identify a service order fee discrepancy, and notify the customer of the service order fee discrepancy.

71. The method of claim 70 in which the traffic analysis software module automatically generates a message to the contracting telecommunications carrier in response to the existence of the service order fee discrepancy, the message requesting adjustment of the billed order fee.

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